Amendments to the Claims

Please cancel claim 14 as shown in the following list of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

1.   (previously presented) Computer graphics processor having a renderer for rendering in parallel N views of 3D images, said renderer comprising:

a rasterizer configured to transverse a surface grid over a surface of a primitive of a 3D image for all N different views of said 3D image such that transversing is performed once for said 3D image,

a shader unit configured to determine a color of the output of the rasterizer and forward a shaded color sample along with its screen coordinates, and

N screen space resamplers, each of said screen space resamplers being configured to resample the shaded color sample determined by said shader unit according to one of the N different views such that resampling is performed N times in parallel for said 3D image.

2.   (previously presented) Computer graphics processor according to claim 1, further comprising:

a texture memory for storing texture maps,

wherein said surface grid is derived from a texture map being associated with said primitive and being stored in said texture memory.

3.   (previously presented) Computer graphics processor according to claim 2,

wherein a grid associated to one of the texture maps stored in the texture memory is chosen as said surface grid, if three requirements are fulfilled, said three requirements including:

said texture map is addressed independently,

said texture map is based on a 2D texture, and

the texture coordinates at the vertices do not make up a degenerate primitive.

1   4.   (previously presented) Computer graphics processor according to claim 3,

2   wherein

3   the texture map with the largest area in texture space is chosen, if

4   more than one texture maps stored in said texture memory fulfill said three

5   requirements.

1   5.   (previously presented) Computer graphics processor according to claim 1

2   or 2, further comprising:

3   a means for addressing a display screen,

4   said renderer having an input for a 3D model and an input for at

5   least one viewpoint for rendering image information for supplying to the

6   addressing means,

7   wherein the renderer further comprises an initial part having an

8   input for the 3-D model and for at least one main view point for rendering objects

9   in the form of at least one main view point Z-stack having stack layers with color

10   information and Z-values,

11   the renderer further comprising

12   a Z-stack constructor in which, from the at least one main view

13   point Z-stack generated by the initial stage, Z-stacks for additional viewpoints are

14   constructed, and a further image information occlusion semantics stage for

15   generating image information from the z-stacks.

1   6.   (previously presented) Computer graphics processor according to claim 5,

2   wherein said renderer further comprises

3   an object extracter for extraction of objects from a view point z-

4   stack.

1   7.   (previously presented) Computer graphics processor according to claim 6,

2   wherein the object extracter is arranged for extracting objects from the at least one

3   main view point z-stack.

1   8.   (previously presented) Computer graphics processor according to claim 5,

2   wherein the renderer comprises a DOF rendering stage

3   wherein the DOF rendering stage is arranged for DOF processing

4 of the at least one main view point z-stack into at least one main view point z-

5 stack comprising DOF blurring.

1 9.   (previously presented) Method of rendering N different views of 3D

2 images, comprising the steps of:

3   transversing a surface grid over a surface of a primitive of a 3D

4 image for all the different N views of said 3D image such that the transversing is

5 performed once for said 3D image,

6   determining a color of the output of the transversing and

7 forwarding a shaded color sample along with its screen coordinates, and

8   resampling the shaded color sample for each of the N different

9 views such that the resampling is performed N times in parallel for said 3D image.

1 10.   (previously presented) Method of rendering N views of 3D images

2 according to claim 9, further comprising the steps of:

3   storing texture maps in a texture memory

4   wherein said surface grid is derived from a texture map being

5 associated with said primitive and being stored in said texture memory.

1 11.   (previously presented) Method of rendering N views of 3D images

2 according to claim 10,

3   wherein a grid associated to one of the texture maps stored in the

4 texture memory is chosen as surface grid, if three requirements are fulfilled, said

5 three requirements including:

6   said texture map is addressed independently,

7   said texture map is based on a 2D texture, and

8   the texture coordinates at the vertices do not make up a degenerate

9 primitive.

1 12.   (previously presented) Method of rendering N views of 3D images

2 according to claim 11, wherein

3   the texture map with the largest area in texture space is chosen, if

4 more than one texture maps stored in said texture memory fulfill said three

5 requirements.

1 13.   (previously presented) Method of rendering N views of 3D images

2 according to claim 11, further comprising the steps of:

3   supplying data and addressing means of a 3D display device

4 wherein for a main view point objects in the form of at least one main view point

5 Z-stack comprising stack layers are rendered with RGB and Z-values, and

6   constructing from the at least one main view point Z-stack z-stacks

7 for additional viewpoints, and

8   generating from the Z-stacks for additional viewpoints by means of

9 Z-tracing data to be supplied to the addressing means.

1 14.   (canceled).